AUTHOR: Berezhkovskiy, D. I. SOV/32-24-7-34/65

TITLE: A New Method for the Determination of the Forging Quality of Metals (Novyy metod opredeleniya kovkosti metallov)

PERIODICAL: Zavodskaya Laboratotiya, 1958, Vol. 24, Nr 7, pp. 858 - 860 (USSR)

ABSTRACT: The determination of this method consists in principle in the fact that samples of a certain shape heated to the desired temperature between two heatable plates of a press are compressed, and then the occurrence of cracks is observed, with the diagram pressure—travel of the upper press plate (the lower one is fixed) being plotted. The continuous increase of the surface of contact of the sample during pressing reproduces the conditions of the forging and drawing process, with an equation being given for the calculation of the deformation. The forging quality itself is calculated from the contact surface of the sample, from the total load and from the pressure by means of a formula given. The pressing is repeated with samples which after the first pressing did not display any cracks; then the sample already pressed is located in another position. The method was employed according to a suggestion made by S.A.

Card 1/2

BEREZHKOVSKIY, D. I.

124-58-9-10632

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 167 (USSR)

AUTHOR: Moshkin, Ye. N., Berezhkovskiy, D. I.

TITLE: The Tensile, Compressive, Flexural, and Torsional Strength of Steel (Soprotivleniye stali deformatsii pri rastyazhenii, szhatii, izgibe i kruchenii)

PERIODICAL: V sb.: Inzhenern. metody rascheta tekhnol. protsessov obrabotki metallov davleniyem. Moscow-Leningrad, 1957, pp 197-206

ABSTRACT: Test diagrams were recorded for steels Nrs 3 and 45 and grade EI572 at temperatures from 550 to 1200°C, also elongation diagrams for steels 22K, EZh3, and EZh4 obtained on the tension-testing machine IM-12A and on the torsion-testing machine MK-20. The bending tests were performed in atmospheric conditions following heating in a furnace. The rates of loading were of the order of 7×10^{-2} to 3×10^{-3} sec^{-1}. The resulting diagrams were approximated by broken lines.

1. Steel--Test methods 2. Steel--Mechanical properties

Card 1/1

V. S. Namestnikov

The Deformation Rate in Forging and Hot Stamping. 122-3-24/30

briefly discussed.
There are 2 graphs, 2 tables and 9 Slavic references.

AVAILABLE: Library of Congress.

Card 2/2

BEREZHKOVSKIY, D.I.

AUTHOR: Berezhkovskiy, D.I., Engineer. 122-3-24/30

TITLE: The Deformation Rate in Forging and Hot Stamping (Skorost' deformatsii pri kovke i goryachey shtampovke)

PERIODICAL: Vestnik Mashinostroyeniya, 1957, No.3, pp. 63 - 66 (USSR)

ABSTRACT: At room temperatures the effect of the rate of deformation in forging and press-forming processes is unimportant, but at elevated temperatures, the difference between a typical laboratory forging rate of about 100 mm/min and the typical production rate of up to 7 000 mm/sec may affect the specific pressures by up to 400%. The rate of deformation is related to the advance rate of the forging press divided by the initial height of the forging. In a chart of the various press-forming processes, relations are given between the forging measurements before and after forging. In each case, the initial height is related to the forging pressure and the maximum press load. The application of this chart to hydraulic, and steam-hydraulic forging and stamping presses, to pneumatic and steam-pneumatic forging hammers, and to hot stamping crank presses is discussed. The relation between the rate of deformation and the press load is given for several cases in graphs. The effect of the rate of deformation on the strength properties of the forging is

Cardl/2

BEREZHKOVSKIY, D.I.

Forging and stamping of heat-resistant alloys. Metallov. i obr. met. no.8:51-61 Ag '57. (MIRA 10:12)
(Heat-resistant alloys) (Forging)

AUTHOR: Berezhkovskiy, D. I. 129 - 8 - 14/16

TITLE: Forging and stamping of high temperature alloys. (Kovka i shtampovka zharoprochnykh splavov).

PERIODICAL: "Metallovedeniye i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.8, pp.51-61 (U.S.S.R.)

ABSTRACT: This is a review of non-Russian practice based on published American and British information. The author deals only with those metallurgical problems which affect the behaviour of the ingot during the forging process. There are four figures and five tables, 18 references, none of which is Russian.

AVAILABLE:

Card 1/1

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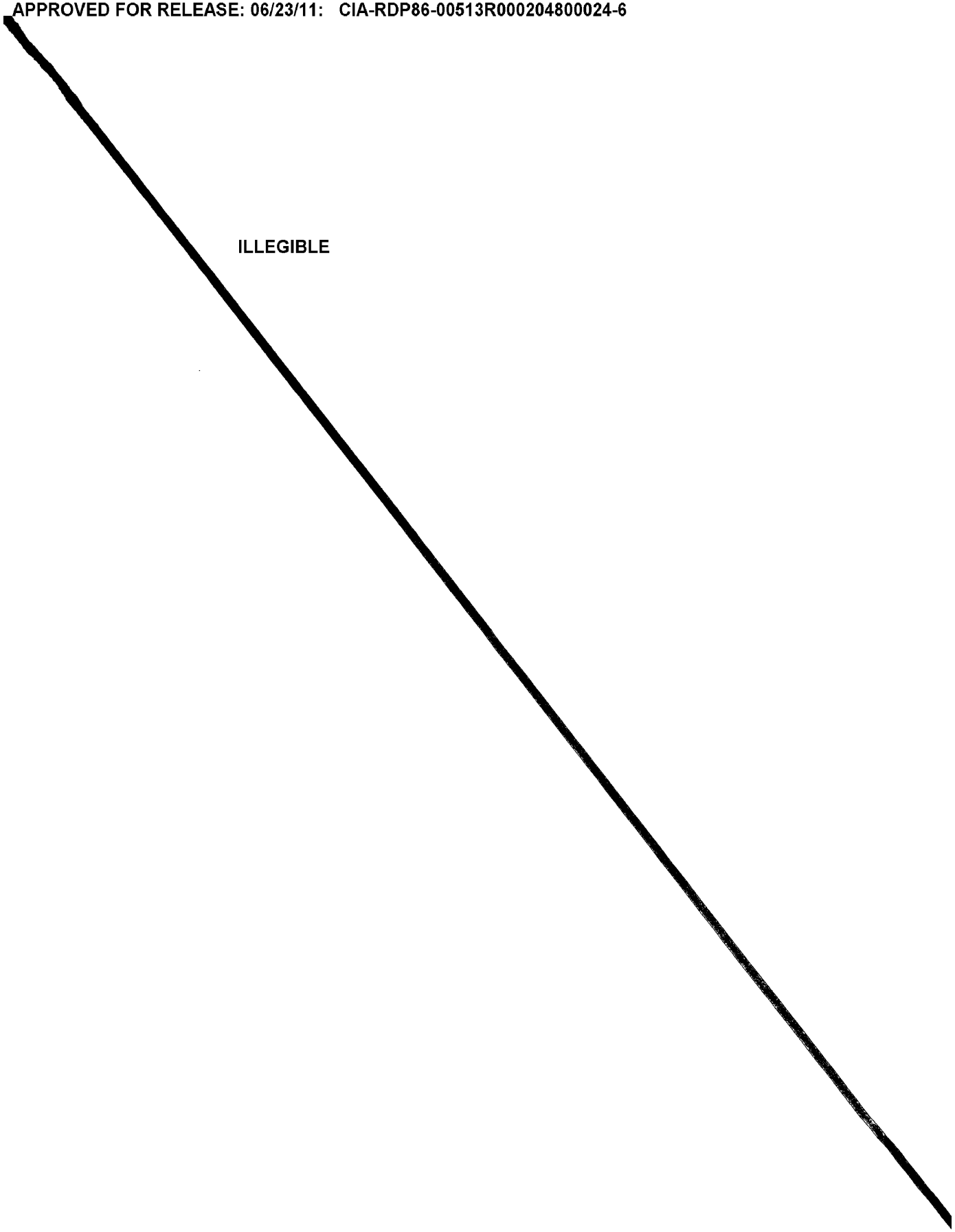

BEREZHKOVSKIY D.I.

PROZOROV, L.V., kandidat tekhnicheskikh nauk; BEREZHKOVSKIY, D.I., inzhener; TIKHOMIROV, N.V., kandidat tekhnicheskikh nauk.

Engineering characteristics of austenite steel forgings. [Trudy] TSNIITMASH 62:164-196 '54. (MLRA 7:9)
(Steel forgings) (Austenite)

Cent Sci Inst Tech. & mech eng

BEREZHKOVSKIY, D. I., PROZOROV, L. V., and TIKHOMIROV, N. V.
[Engr.] [Cand. Tech. Sci.] [Cand. Tech. Sci.]

"Technological Features of the Forging of Austenitic Steel"

Mashgiz 1954
Translation 568487

BEREZHKOVSKIY, D. I.

Chemical Abst
Vol. 48 No. 9
May 10, 1954
Metallurgy and Metallography

(2) Met 3

Forging, stamping, and rolling iron with spheroidized graphite. G. P. Ohnov and D. I. Berezhkovskii. *Vestnik Mashinostroeniya* 33, No. 12, 29-36 (1953).—Specimens selected to have either pure ferrite or pure pearlite structure were hot-worked under different conditions. Max. ductility range coincided with 840-1050°, while mech. properties varied nonuniformly with temp. (curves are given). These irons can stand considerable plastic deformation at these temps., up to 9 times in swaging dies, 80% in rolling, 60% in upsetting, and a 4-times reduction in open forging. Hot-working up to 50% reduction increases the longitudinal strength by 1.5-2 times, but further reduction has no effect.
J. D. Cat

BEREZHKOVSKIY, D. I.

Nagrev metalla pered kovkoi i shtampovkoi. Moskva, Mashgiz, 1950.
117,(3) p. illus.

Bibliography: p. (119)

("Heating up metals before forging and stamping.)

DLC: TS213.B47

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

BEREZHKOVSKAYA, M.I., kand. ekonom. nauk

Economic efficiency of new designs of furnaces at container glass factories. Stek. i ker. 22 no.1:12-15 Ja '65. (MIRA 18:7)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut stekla.

BEREZHKOVSKAYA, M.I., kand.ekonom.nauk; DUBOLAZOVA, L.B., inzh.

Some facts about the manufacture of glass in the U.S.A. Stek. i ker. 20 no.5:42-43 My '63. (MIRA 16:7)

1. Institut stekla.

(United States--Glass manufacture)

BEREZHKOVSKAYA, M.I., kand.ekonomicheskikh nauk

Make every possible use of the production potentials of staple fiberglass. Stek. i ker. 20 no.4:1-4 Ap '63. (MIRA 16:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stekla.
(Glass fibers)

BIREZHKOVSKAYA, M. I., kand. ekonom. nauk

Economic evaluation of some methods of producing high-voltage insulators. Stek. i ker. 20 no.3:39-42 Mr '63. (MIRA 16:4)

1. Institut stekla.

(Electric insulators and insulation)

BEREZHKOVSKAYA, M.I.

Economic efficiency of the manufacture and use of foam glass.
Stek.i ker. 19 no.5:34-36 My '62. (MIRA 15:5)
(Glass, Cellular)

BEREZHKOVSKAYA, M.I.

Specializing the production of containers is an important potential in lowering the net cost of glass. Stek. i ker. 18 no.6:43-44 Je '61. (MIRA 14:7)
(Glass manufacture)
(Containers)

15 (2)

AUTHORS: Savitskiy, M. R., Berezhkovskaya, M. I. SOV/72-59-9-13/16

TITLE: Foreign Standards for Window Glass

PERIODICAL: Steklo i keramika, 1959, Nr 9, pp 44 - 45 (USSR)

ABSTRACT: The standards of the following countries are mentioned in the paper under review: USA (Table 1), England (Table 2), German Federal Republic (Table 3), Austria (Table 4), Czechoslovakia, and Portugal (Table 5). The standardized dimensions and types of window- and plate glass of each country are mentioned, as well as the type of packing. There are 5 tables.

Card 1/1

glass factories mentioned in table 2. By an increase of the glass-mass output, the reduction of the production of 3mm glass in favor of 2mm glass, and the reduction of the weight of the 2 mm glass, the window-glass factories would be in a position to produce more than 17,000,000 m^2 of glass additionally. For the production of such an amount of glass, it would be necessary to build two new factories at a cost of approximately 150,000,000 rubles. In some factories, the increase of the specific glass-mass output requires an increase of the glass-drawing speed up to 95-100 m/h, as is the case in a number of leading factories. The increase of the production capacity necessitates the solution of other problems, such as the mechanization of glass cutting, of the packing, and an improved working organization. The attention of the personnel, the scientific and design offices, should be directed towards the utilization of the production capacity available, for the benefit of a further development of the glass industry. There are 2 tables.

15 (2)

AUTHOR: Berezhkovskaya, M. I. SOV/72-59-9-10/16

TITLE: The Production Capacities of Window Glass Factories Must Be Better Utilized

PERIODICAL: Steklo i keramika, 1959, Nr 9, pp 37-40 (USSR)

ABSTRACT: The technical-economical figures for 14 window-glass factories are shown in table 1. To determine the efficiency achieved with modernization, all window-glass works were divided into 3 groups, according to the size of the furnaces. To the first group belong the dualsystem factories: Chagodoshchenskiy, Lisichanskiy, Konstantinovka imeni Oktyabr'skaya revolyutsiya and Gomel'. To the second group belong the single-system factories with a furnace surface of from 200 to 300 m^2: Anzhero-Sudzhensk, Bytosh', "Velikiy Oktyabr'", "Dagestanskiye ogni" imeni Volodarskiy, Krasnousol'skiy, Ulan-Ude, Ashkhabad. To the third group belong factories with furnace surfaces up to 200 m^2: Magnitogorsk and Misheronskiy. No production increase was achieved in a number of factories by the re-designing of the machine-continuous glass melting furnace installations. The best technical-economical figures were obtained by the window-

Card 1/2

HEREZHKOVSKAYA, M.

Measuring labor productivity in the glass industry. Biul. nauch. inform.: trud i zar. plata no.7:62-66 '59. (MIRA 12:10)
(Glass manufacture--Labor productivity)

Some Possibilities of Raising the Working Productivity in Glass Works SOV/72-59-1-15/21

may be regarded as anomalous that the workers are not capable of doing themselves minor repair work in the plants where they are occupied, which makes necessary an examination of their training. On the basis of a centralization of the repair work and an adequate solution of the transportation problem it should be possible to reduce the number of hands and repair workers, which in turn would improve the performance of each worker. An elaboration of standard regulations concerning the number of hands in glass works is extremely necessary. There are 4 tables. The Chagodoshcha Plant's figures are also given in tables 2, 3 and 4.

Card 2/2

15(6)

SOV/72-59-4-15/21

AUTHOR: Berezhkovskaya, M. I.

TITLE: Some Possibilities of Raising the Working Productivity in Glass Works (Nekotoryye rezervy povysheniya proizvoditel'nosti truda na stekol'nykh zavodakh)

PERIODICAL: Steklo i keramika, 1959, Nr 4, pp 44 - 46 (USSR)

ABSTRACT: The ratio of the number of workers employed in the main and auxiliary works departments of the Ashkhabad and Gomel' Works may be learnt from table 1. Even in the main departments of the works almost 1/3 of the workers have to perform auxiliary work. In the works for pane glass the number of hands is higher than 50%, the majority of them performing transportation and repair work (Table 2). The distribution of transportation workers in the main departments of the works may be seen from table 3 and is due to insufficient mechanization and organization of transportation work. A second great group of hands perform repair work, and their distribution in the departments of the works is shown in table 4. This is mainly due to the decentralization of repair work. The author of this article says in conclusion that it

Card 1/2

BEN', I., inzh.; BEREZHKOVSKAYA, M., inzh.; KOZLOVA, O., inzh.; TYURIN, P., inzh.

Potentialities for the production and use of window glass. Zhil. strei. no.2:20-21 '59. (MIRA 12:6)
(Glass)

BERIZHKOVSKAYA, M.I.

Some technical and economic data on glass manufacture in foreign countries (from materials in foreign journals). Stek. i ker. 15 no.2:37-40 F '58. (MIRA 11:3)
(Glass manufacture)

BEREZHKOVSKAYA M.I.

BEREZHKOVSKAYA, M.I.

Increasing labor productivity in structural glass plants. Stek. i ker. 14 no.12:22-23 D '57. (MIRA 11:1)
(Glass manufacture)

BEREZHKOVSKAYA, M.I.

AUTHOR: Berezhkovskaya, M.I. 72-2-15/20

TITLE: Some Technical and Economic Data Concerning Glass Production Abroad (Nekotoryye tekhniko-ekonomicheskiye dannyye o proizvodstve stekla za rubezhom). Material Taken From Foreign Periodicals (Po materialam inostrannykh zhurnalov).

PERIODICAL: Steklo i Keramika, 1958, Nr 2, pp. 37-40 (USSR)

ABSTRACT: These are abstracts and translations from American, West-German, French, Belgian, English, Japanese, and Italian periodicals. Neither authors nor the names of the periodicals are given. There are 5 tables.

AVAILABLE: Library of Congress

Card 1/1

Berezhkovskiy M.I.

BEREZHKOVSKIY, M.I.; VEZLOMTSEV, V.I.

Work organization in crate making and crating departments. Stek.i ker. 14 no.8:23-25 Ag '57. (MIRA 10:10)
(Glass) (Containers)

Berezhkovskaya, M.I.

GUTON, V.G.; BEREZHKOVSKAYA, M.I.; EL'KINSON, L.Z.

Over-all mechanization and automation of processes in the production of window glass. Stek. i ker. 14 no.3:6-11 Mr '57. (MLRA 10:4)
(Plate glass) (Glass manufacture--Equipment and supplies)

Glass Works. Increase of Working Productivity in the Building 72-12-1o/14

too: in 194o the furnace area amounted to an average of 145 m^2 and in 1955 205 m^2, 74,2 °/o of the total area is covered by furnaces of more than 2oo m^2. Also the machine equipment capacity was considerably increased. The output of window glass, for one worker, has increased in the course of the fifth five-year-plan by 44 °/o which means that the output was increased without increasing the number of workers. As table 2 shows, however, not all possibilities have been taken into consideration. The furnaces covering an area of 151 - 2oo m^2 turn out to be the most efficient ones, in the furnaces of areas of more than 2oo m^2 the specific output is somewhat lower, also the quality of the glass mass is worse in the great furnaces than in the smaller ones. Thus the working productivity of the great furnaces must be improved by abolishing low glass band velocities, and extreme thickness of the glass band. Also the exploitation of the glass mass has to be improved by reduction of breaking and the fabrication waste. Not in all works the rhythm of working is observed which leads to fluctuations of the daily output up to 1o - 15 °/o.
There are 2 tables.

AVAILABLE: Library of Congress.

Card 2/2

BEREZHKOVSKAYA, M.I.

72-12-19/14

AUTHOR: Berezhkovskaya, M. I.

TITLE: Increase of Working Productivity in the Building Glass Works. (Povysheniye proizvoditel'nosti truda na zavodakh stroitel'nogo stekla).

PERIODICAL: Steklo i Keramika, 1957, Nr 12, pp. 22-23 (USSR).

ABSTRACT: In the course of the fifth five-year-plan the costs of production of window glass were reduced by almost 30 %, i. e. mainly by mechanization and improvement of utilization of equipment. However, the production of building glass still remains very wearisome. A further improvement of the profitableness can be obtained only by an increase of the productivity in the existing works. Simultaneously with the mechanization of intensive working processes and automatisation of production processes the increase of the production capacity of the technological equipment, mainly of the tank furnaces, is of greatest importance, as well as improvement of utilization of the ready glass mass. In the postwar time the fabrication capital of the glass industry in the most important position has increased by the 3,5 - fold, whereby its structure has obviously improved, as table 1 shows. The total area of the tank furnaces has almost doubled from 1940 to 1955 and reached 5,350 m^2. The capacity of the tank furnaces increased,

Card 1/2

ACC NR: AP6031137

toxoids obtained were harmless to laboratory animals. Orig. art. has: 2 tables. [W. A. 60] [GC]

SUB CODE: 06/ SUBM DATE: 05Nov65/

Card 2/2

L 05136-67 EWT(1) RO/JK

ACC NR: AP6031137 SOURCE CODE: UR/0438/66/028/004/0080/0083

AUTHOR: Nechayevs'ka, M. R. -- Nechayevskaya, M. R.; Kalynychenko, M. F. -- Kalinichenko, N. F.; Bergol'tseva, L. A. --Berhol'tseva, L. A.; Biryukova, S. V.; Berezhkivs'ka, L. Ya. --Berezhkovskaya, L. Ya.

ORG: Khar'kov Institute of Vaccines and Serums im. Mechnikov (Kharkivs'kyy institut vaktsih i sirovatok)

TITLE: Fillers for casein nutrient media used in the study of toxin formation by gas

SOURCE: Mikrobiolohichnyy zhurnal, v. 28, no. 4, 1966, 80-83

TOPIC TAGS: toxin, anatoxin, gas gangrene, experimental nutrient media, toxin formation/porolon

ABSTRACT: New standard fillers--porolon, fibrin, and sawdust, proved themselves good substitutes for the ground meat and millet usually used in the culture and production of gas gangrene toxins. The toxins and toxoids of Cl. oedematiens, Cl. perfringens, and Cl. septicum showed a high degree of activity in casein hydrolysate nutrient media containing porolon, fibrin, or sawdust fillers. The

Card 1/2

L 05136-67

L 05134-67

ACC NR: AP6031134 O

of the medium between 7.2—7.4, and the temperature at 38C. Detoxification takes seven to ten days under these conditions. The antitoxin-fixing activity of the toxiod obtained fluctuates between 4 and 8 EC with the native toxin titer being 400—800 Dlm/ml. The best procedure for denaturation of Cl. oedematiens toxin is addition of 0.4% Formalin. A temperature of 38C is maintained for two days, followed by storage at room temperature for 5—7 days. Toxoids with antitoxin-fixing activities of 70--120 EC and a native toxin activity of 15,000--22,000 Dlm/ml were obtained. The Cl. septicum was denatured with minimum loss of antitoxin-fixing properties by the addition of two consecutive doses of 0.15 and 0.1% Formalin, at 38C for two days with subsequent storage at room temperature for 5—7 days. The resulting toxoids have an activity of 2--4 EC with native toxin titers of 200--400 Dlm/ml. [Based on authors' abstract] [W.A.50] [GC]

SUB CODE: 06, 13/ SUBM DATE: 07Apr65/

Card 2/2

WA50 L 05134-67 EWT(1) JK EWA-30

ACC NR: AP6031134 SOURCE CODE: UR/0438/66/028/004/0056/0061 19 B

AUTHOR: Nechayevs'ka, M. R.--Nechayevskaya, M. R.; Cherkas, G. P.--Cherkes, G. P.; Kalinichenko, M. F.--Kalinichenko, N. F.; Biryukova, S. V.; Berezhkivs'ka, L. Ya.--Berezhkovskaya, L. Ya.; Pidgorna, L. G.--Podgornaya, L. G.; Mukhina, A. O.--Mukhina, A. A.; Polchenko, O. T.; Leybova, I. M.; Konik, V. Ya.

ORG: Khar'kov Institute of Vaccines and Sera im. Mechnikov (Kharkivs'kyy institut vaktsin i sirovstok)

TITLE: Formation conditions of anatoxins of Clostridium perfringens, Cl. Oedematiens and Cl. spepticum from toxins obtained in meatless media

SOURCE: Mikrobiolohichnyy zhurnal, v. 28, no. 4, 1966, 56-61

TOPIC TAGS: toxoid, toxin, clostridium perfringens, Clostridium oedematiens, Clostridium septicum, bacteria toxin

ABSTRACT: Detoxification conditions for Clostridium perfringens, Cl. oedematiens and Cl. septicum toxins were studied. Cl. perfringens is best denatured by adding two doses of 0.3 and 0.2% formaline at 24-hr-intervals, while maintaining the pH

Card 1/2

BEREZHKOVA, R.V.; DORMIDONTOVA, L.S.

Changes in the nervous system in leukemias. Zhur.nevr.i psikh. 60 no.5:562-567 '60. (MIRA 13:9)

1. Kafedra patologicheskoy anatomii (zav. - prof. N.Ye. Yarygin) i kafedra nervnykh bolezney (zav. - dotsent V.N. Klyuchikov) Yaroslavskogo meditsinskogo instituta na baze Oblastnoy bol'nitsy (glavnyy vrach Z.M. Denisenko).

(LEUKEMIA) (NERVOUS SYSTEM)

YARYGIN, N.Ye., prof.; BEREZHKOVA, R.V.

Case of myeloblastosis combined with lymphogranulomatosis [with summary in English, p.63]. Probl.gemat. i perel.krovi 4 no.1:48-51 Ja-F '59. (MIRA 12:2)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. N.Ye.Yarygin) Yaroslavskogo meditsinskogo instituta.
(HODGKIN'S DISEASE, compl.
leukemia (Rus))
(LEUKEMIA, compl.
Hodgkin's dis. (Rus))

BEREZHKOVA, K. V.
Min Health USSR. Central Inst for the Advanced Training of Physicians.

BEREZHKOVA, K. V.- "Electrophoretic investigation of the protein fractions of blood indications of young cattle with various types of feeding and housed in stalld." Min Higher Education USSR. Moscow Veterinary Academy. Chair of Clinical Diagnostics. Moscow, 1956.
(Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', No. 20, 1956

BEREZHKOVA, G.V.; ROZHANSKIY, V.N.

Polysynthetic twins in corundum whiskers. Fiz. tver. tela 6 no.9: 2745-2749 S '64. (MIRA 17:11)

1. Institut kristallografii AN SSSR, Moskva.

ROZHANSKIY, V.N.; BEREZHKOVA, G.V.

Use of electron diffraction microscopy methods in measuring the flexure of ribbon-shaped crystals caused by axial dislocations. Dokl. AN SSSR 156 no.6:1339-1340 Je '64. (MIRA 17:8)

1. Institut kristallografii AN SSSR. Predstavleno akademikom A.V. Shubnikovym.

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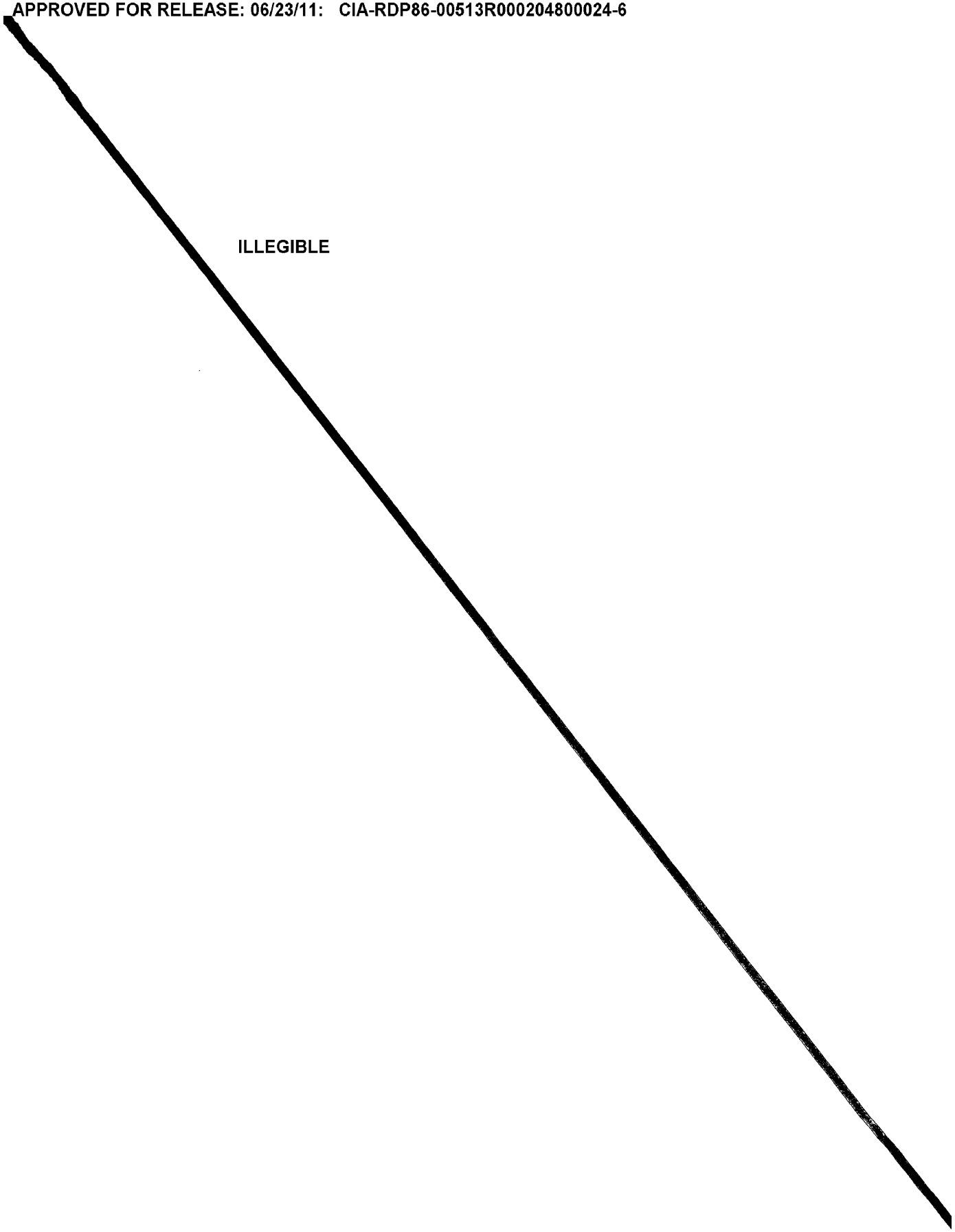

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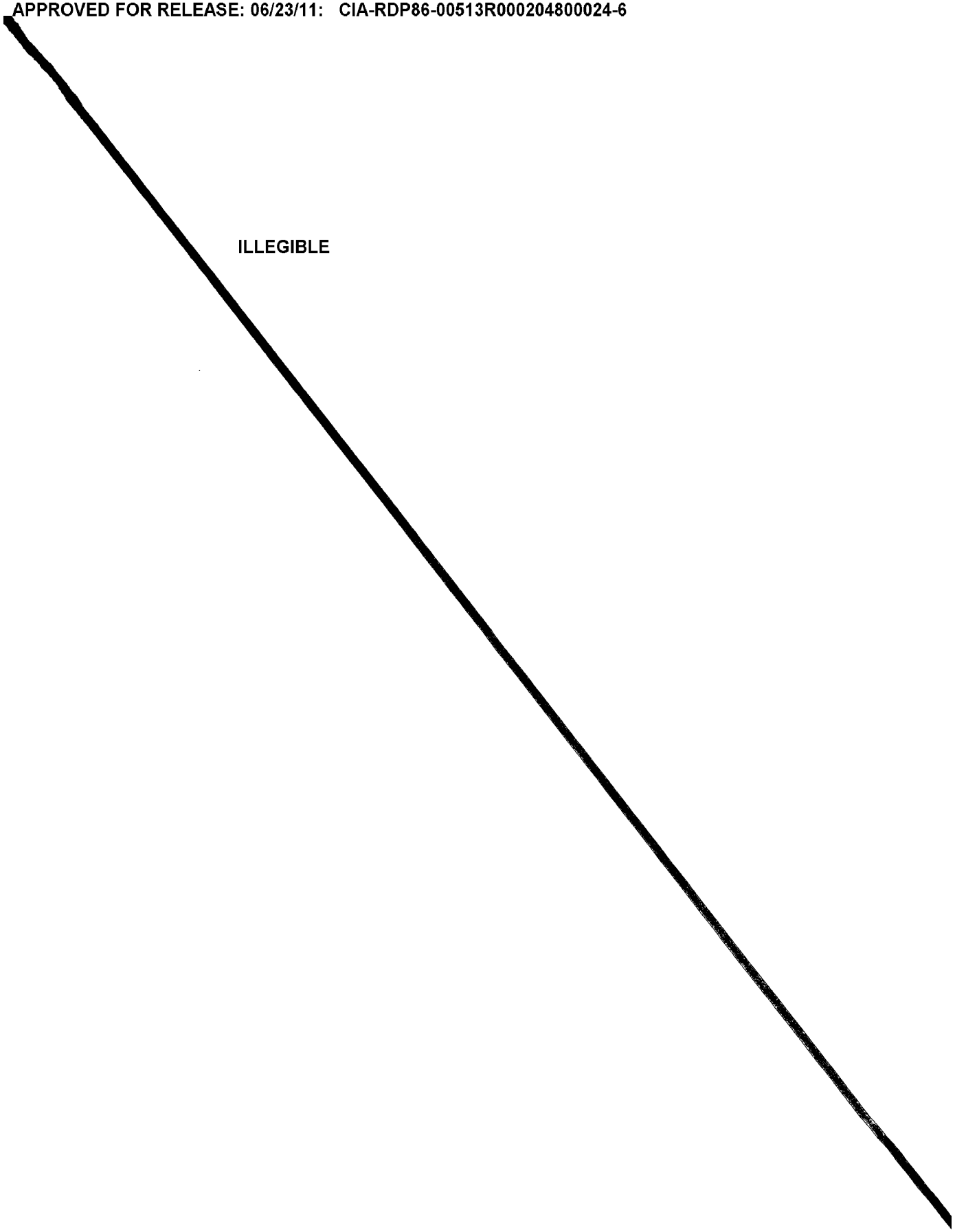

ACCESSION NR: AP4039412

inert gas; 1200C in the partial vacuum). The process can be represented by the following reactions:

$$Al_2O_3 + C \rightarrow 2AlO + CO \text{ and}$$
$$4AlO + O_2 \rightarrow 2Al_2O_3.$$

The authors conclude that the method is very satisfactory for rapid growth of fibrous crystals of Al_2O_3 up to 2 cm in length. Improvements in technique may increase this length. Orig. art. has: 3 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography AN SSSR)

SUBMITTED: 08Jul63 ENCL: 00

SUB CODE: SS NO REF SOV: 001 OTHER: 007

Card 2/2

ACCESSION NR: AP4039412 S/0070/64/009/003/0442/0444

AUTHORS: Papkov, V. S.; Berezhkova, G. V.

TITLE: Growing fibrous crystals of aluminum oxide

SOURCE: Kristallografiya, v. 9, no. 3, 1964, 442-444

TOPIC TAGS: alumina, crystal growth, crystal fiber, phase transition

ABSTRACT: The authors employ a technique for growing fibrous crystals of Al_2O_3 differing somewhat from methods generally used. When corundum crystals are heated in a graphite furnace to a temperature near 2000C in an atmosphere of unpurified inert gas (argon or nitrogen) or in a partial vacuum (to 10^{-1} mm Hg), numerous fibrous crystals of α-Al_2O_3 form in the cooler parts of the furnace (on the surface of the furnace itself or on the surface of a corundum crystal), precipitating from the gas phase. Since Al_2O_3 has a low vapor tension, it does not volatize readily. In a reducing environment at high temperatures, it reduces to the volatile oxide AlO through the agency of C (at a temperature of about 2000C). AlO is then again oxidized to Al_2O_3, because of oxygen in the furnace, and is precipitated in parts of the furnace where the temperature is about 1800C (in the

Card 1/2

ACCESSION NR: AP4041219

ASSOCIATION: Institut kristallografii AN SSSR, Moscow (Institute of Crystallography, Academy of Sciences)

SUBMITTED: 05May64 ENCL: 00

SUB CODE: SS NO REF SOV: 007 OTHER: 042

Card 3/3

ACCESSION NR: AP4041219

the axis of the ribbon are edge, screw, or mixed dislocations. Comparison of the experimental data on the basal Burgers vectors with theoretical values published earlier shows that edge dislocations more often have only one Burgers vector, while screw dislocations have several. Axial screw dislocations apparently participate in growth. This is particularly evident in the case of thick ribbons containing a string of axial dislocations. When the direction of growth is changed, this string may maintain the total screw component because rearrangement of the dislocation structure takes place at the bends and a part of the dislocations comes out on the surface. the conclusion may be drawn that axial screw dislocations can participate in the growth of acicular crystals but their chief influence is on thick crystals. The participation of the "layer mechanism," which consists in the origin and directional propagation of layers of growth, is quite obvious in the growth of thin, acicular ribbons, where the role of adsorbed impurities, which hinder crystallization at the surface (where feeding does not ensure active crystallization), is apparently very great. Acicular growth must be considered the consequence of directed feeding and also of the confluence of the crystallization and adsorption processes which retard crystallization. "Acknowledgement is made to V. L. Indenbom and A. A. Chernov for fruitful discussions and advice." Orig. art. has: 16 figures and 23 equations.

Card 2/3

ACCESSION NR: AP4041219 G/0030/64/006/001/0185/0205

AUTHOR: Rozhanskiy, V. N.; Berezhkova, G. V.

TITLE: Electron microscopic investigation of the real structure of corundum whiskers

SOURCE: Physica status solidi, v. 6, no. 1, 1964, 185-205

TOPIC TAGS: crystal structure, acicular crystal, corundum whisker, ruby crystal, axial dislocation

ABSTRACT: An electron diffraction study is reported of α-Al_2O_3 whiskers grown on ruby crystals by heating the latter in a graphite oven in an argon or nitrogen atmosphere to temperatures near the melting point. In most of the cases, the thread-like crystals prepared were oriented along the [0001] direction of the bar (often with an uneven surface and a cross section of 0.1 100 μ) or thin, acicular basal plates (ribbon). The most suitable for the study of dislocation structur were the basal plates. The results of the investigation show that whiskers do not always have axial dislocations. The dislocations lying along

Card 1/3

luminescence regions were observed in the fiber. It is noted that activated crystal fibers, unlike pure ones, are not fully soluble in water. The undissolved residue forms bent fibers equal in length to the initial fibers (which are up to several tens of centimeters in length). Under ultraviolet light they exhibit a more intense blue luminescence than the initial fibers. Absorption spectra show that during the growth process the crystals capture the polyvinyl alcohol. It is considered that the insoluble residue may form because of the interaction of the alcohol with the silver ions. "In conclusion the authors express deep thanks to Z. B. Perekalina for her help during the execution of the work and the discussion of the results and to S. V. Grum-Grshimaylo for the obligingly granted opportunity of working on the ultraviolet microscope." Orig. art. has: 1 figure.

ASSOCIATION: Institut kristallografii AN SSSR, Moscow (Institute of Crystallography, AN SSSR)

SUBMITTED: 03Jan63 DATE ACQ: 11Jun63 ENCL: 00

SUB CODE: PH NO REF SOV: 004 OTHER: 001

L 11060-63 T-2/EPR/EWP(j)/EPF(c)/EWT(1)/EFF(n)-2/EWP(q)/EWT(m)/BDS/EEC(b)-2--AFFTC/ASD
ESD-3/SSD--Pr-4/Pc-4/Pr-4/Ps-4/Pi-4--RM/WW/JD/WH/IJP(C)
ACCESSION NR: AP3000634 S/0181/63/005/005/1479/1480

AUTHOR: Lider, V. V.; Bereshkova, G. V.; Rozhanskiy, V. N.

TITLE: Luminescent fiberlike crystals of sodium chloride

SOURCE: Fizika tverdogo tela, v. 5, no. 5, 1963, 1479-1480

TOPIC TAGS: luminescent fiber, sodium chloride luminescence, copper impurity luminescence, silver impurity luminescence

ABSTRACT: The luminescence of crystal fibers of NaCl containing Ag (0.2, 0.4, 0.5, and 0.9% by weight) and Cu (0.1 and 0.2% by weight) impurities has been observed by a monochromator with a photoelectric unit. The fibers were grown by using seeds in a saturated solution of NaCl containing long molecular chains (polyvinyl alcohol) in a concentration of 0.03 g/100 cm^3); this process produced very long fibers. The luminescence was excited by a lamp. Cu^{++} ions were introduced by addition of a water-soluble salt ($CuCl_2$); fibers grown in this manner did not luminesce. Ag^{++} ions were introduced by means of a water-soluble complex $[Ag(NH_3)_2]OH$; the silver-containing fibers exhibited blue luminescence when excited by light in the 250- to 400-mμ band. Studies in an ultraviolet microscope showed the ions to be incorporated in a nonuniform manner. Separate bright

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800024-6

L 13391-63

ACCESSION NR: AP3000775

3

in Figs. 1 and 2. "In conclusion, the authors express their thanks to A. A. Chernov and Y. Ya. Khaimov-Mal'kov for valuable remarks during discussions on results of the work." Orig. art. has: 3 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography, Academy of Sciences SSSR)

SUBMITTED: 28Mar62 DATE ACQ: 21Jun63 ENCL: 02

SUB CODE: OO NO REF SOV: 007 OTHER: 015

Card 2/2

L 13191-63 EWT(1)/EWP(q)/EWT(m)/BDS/EEC(b)-2 AFFTC/ASD JD/JG/IJP(C)

ACCESSION NR: AP3000775 S/0070/63/008/003/0420/0426

AUTHOR: Berezhkova, G. V.; Rozhanskiy, V. N.

64
61

TITLE: Mechanisms of growing ionic filiform crystals from solutions

SOURCE: Kristallografiya, v. 8, no. 3, 1963, 420-426

TOPIC TAGS: crystal growth, filiform crystal, screw dislocation, alum, KBr, ionic crystal, polyvinyl alcohol

ABSTRACT: The authors have studied the growth of ionic filiform crystals from aqueous solutions through a porous medium and on seed crystals when polyvinyl alcohol is added to the solution. They have established the occurrence of two different growth mechanisms: distinctive "squeezing out" of crystals from pores of the substrate in the first case and growth on screw dislocations in the second. In the first case filiform crystals of alum grow from a substrate of silica gel, and the growth occurs from the base. Crystals of KBr, on the contrary, developing in a solution containing polyvinyl alcohol, grow from the top. The authors show that in the first case the rate of growth does not depend on the cross-sectional dimensions, but in the second the rate is approximately inversely proportional to the thickness of the crystal. The mechanisms of growth are shown schematically

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S/081/62/000/016/004/043
B168/B186

Growing of single crystals of zinc...

The fact that crystals grown in an ultrasonic field have a large number of block boundaries indicates that in these crystals the dislocation density is higher than in those grown under normal conditions, and it is suggested that this effect is one of the reasons for the increased strength. [Abstracter's note: Complete translation.]

Card 2/2

40965
S/081/62/000/016/004/043
B168/B186

18.9500

AUTHORS: Bagdasarov, Kh. S., Berezhkova, G. V., Kapustin, A. P.

TITLE: Growing of single crystals of zinc in an ultrasonic field

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 16, 1962, 30, abstract 16B180 (In collection: Primeneniye ul'traakust. k issled. veshchestva. no. 12, M., 1960, 41-44)

TEXT: Investigations (RZhKhim, no. 2, 1959, 3762) were continued with a view to clarifying the effects of the ultrasonic field on the distribution of dislocations. Zinc crystals grown in such a field by Bridgman's method were tested for compressive strength before and after calcination at 350°C, and crystals not grown in an ultrasonic field, but only irradiated, were also tested. The reasons for the former being stronger than the latter are discussed. From a comparison of the compression curves for polycrystals and single crystals it is concluded that the toughening effect is due to increased block structure in the crystal grown in an ultrasonic field; this is indicated also by Laue diffraction patterns showing the reflex bifurcation characteristic of the block structure.

Card 1/2

Concerning the Dependence of Faulting Limits on the Crystallographic Orientation of Single Crystals.

76000
SOV/70-4-5-22/36

The higher experimental values (dots above the curve) of σ_c are apparently related to the fact that faulting is preceeded by slip along glide planes that increases the resistivity of the crystals. Selivanov, K. V. is acknowledged for assistance. There are 6 figures; 1 table; and 8 references, 5 Soviet, 3 U.S. The U.S. references are: Gilman, J. J., J. Metals, 6, 5, 621-629, 1954; Smakula, A., Klein, M., J. Chem. Phys., 21, 1, 100-104, 1953; Ballard, S. S. , Combes, L. S., J. Opt. Soc. Amer., 43, 11, 975-976, 1953.

ASSOCIATION: Crystallographical Institute of the Academy of Sciences of the USSR (Institut kristallografii AN SSSR)

SUBMITTED: April 29, 1959

Card 5/5

Concerning the Dependence of Faulting Limits on the Crystallographic Orientation of Single Crystals.

76000
SOV/70-4-5-22/36

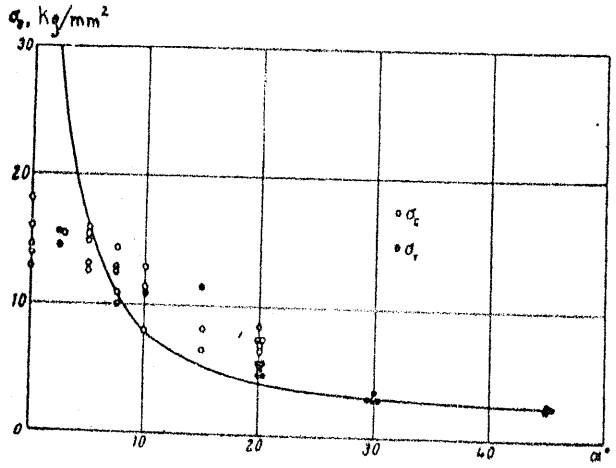

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Fig. 5. The dependence of σ_c and σ_r on α in CsI

Concerning the Dependence of Faulting Limits on the Crystallographic Orientation of Single Crystals.

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30V/70-4-5-22/35

Table A

α		0	2,5	5	7,5	10	15	20	30	45
(110) [001]	χ	0	1,8	3,5	5	7	10	14	20	30
	λ	0	2,5	5	7,5	10	15	20	30	45
(101) [010]	χ	45	44,8	44,5	44,2	44	43	41	38	30
	λ	90	87,5	85	82,5	80	75	70	62	45

The swelled bands of the CaI cylinders, compressed along their axes having $\alpha \leqslant 20^{\circ}$, were always normal to [100] and the slip was parallel to [110]. The deviations from this were proved to occur when $\alpha > 20^{\circ}$ and to increase with increasing α until it reached 30°, above which no faulting took place. The TlBr + TlI cylinders showed deviations in wider limits and faulting even at $\alpha = 45^{\circ}$. The deviation of the experimental figure from the theoretical values (Fig. 5) indicates that the above equation is not strictly accurate.

Card 3/5

function of the shear stress, τ_c, concerned, as defined in $\tau_c = \sigma_T \sin \chi \cos \lambda$, where σ_T is yield limit which actually coincides with the faulting limit of the authors; χ is the angle between the crystal axis and its projection on the slip plane; λ is the angle between the crystal axis and the slip direction. To prove or disprove the validity of the equation, the authors undertook numerous experiments with CsI and TlBr + TlI crystals, from which they cut off cylinders, 6 mm high, 3 mm in diameter and 5 mm high, 2mm in diameter respectively, and annealed for 3 hours at 510° C and 280° C respectively. The angle α between the cylinder axis and [110] of the crystal was determined with an accuracy of + 10'. The χ and λ at varying α are compiled in the Table A.

24.7100

76000
SOV/70-4-5-22/36

AUTHORS: Regel', V. R., Berezhkova, G. V.

TITLE: Concerning the Dependence of Faulting Limits on the Crystallographic Orientation of Single Crystals.

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 5, pp 761-767 (USSR)

ABSTRACT: The mechanism of displacements as a result of plastic deformations has been studied by numerous scientists including the Soviet crystallographers Urusovskaya, A. A., Pereklina, Z. V., Dubov, G. A., Klassen-Neklyudova, M. V. and Regel', R. V. The term "faulting" is used instead of "kink-band formation" used by the American authors. The compression stress, σ_c, that causes the climb of glide planes, concentrates them and forms the first break along which a concentrated displacement takes place (and, consequently, the stress field becomes instantly relieved) is termed "faulting limit". It depends on the orientation of the crystal under test and has been considered an unequivocal

Card 1/5

A New Device for Micromechanical Tests and Its Application to the Investigation of the Mechanical Properties of Polymers

SOV/32-25-1-37/51

ASSOCIATION: Institut kristallografii Akademii nauk SSSR (Institute of Crystallography of the Academy of Sciences USSR)

Card 3/3

and creep curves can be plotted by means of this new device. The first design variant of the device has been already described (Ref 3). In the present case, an improved design is described which was shown at the Industrial Exhibition of 1957 and 1958 as well as at the Brussels World Exhibition. The kinematic scheme of the device permits an axial pressure load (Fig 1). Selenium photocells of the SF-10 type were used in the dynamometer. For recording the photocurrent various commercial self-recorders of the type of Kurnakov's pyrometer, EPP-09, PS-383, MF-4, and others can be used. Various plastics, monocrystalline (Refs 5-7), polycrystalline and high-molecular substances (Refs 7,8) were tested. The reproducibility was tested with homogeneous polymethyl methacrylate (I). Furthermore, tests were carried out with (I) at various softener contents (dibutyl phthalate), as well as with the lattice-like (prostranstvenno sshitiy) polymer-escapon. In this connection, observations were made which are important to the technology of production. The observations are described. There are 7 figures and 8 Soviet references.

7(0),15(9)

AUTHORS: Regel', V. R., Berezhkova, G. V., Dubov, G. A.

SOV/32-25-1-37/51

TITLE: A New Device for Micromechanical Tests and Its Application to the Investigation of the Mechanical Properties of Polymers (Novyy pribor dlya mikromekhanicheskikh ispytaniy i yego primeneniye dlya issledovaniya mekhanicheskikh svoystv polimerov)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 1, pp 101-105 (USSR)

ABSTRACT: Devices for testing small samples must comply with special requirements as to rigidity and sensitivity. The most commonly used devices, the Soviet VIAM and that designed by Shovenar (Ref 1) show many defects so that they must be improved. A new recorder for micromechanical tests was designed by the Institut kristallografii Akademii nauk SSSR (Institute of Crystallography of the Academy of Sciences USSR) and the kafedra kristallofiziki fizicheskogo fakul'teta MGU (Chair of Crystal Physics of the Faculty of Physics of the Moscow State University). It is based on the application of a photoelectric optical dynamometer (Ref 2). Extension and compression curves as well as relaxation curves of stresses

S/058/60/000/008/002/009
A005/A001

The Influence of the Stress State Picture on the Parameters of the Yield Curves of Certain Plastics

quence of the variation of distances between them under the effect of normal stresses; 2) the interaction of destruction processes (breaks of the individual chemical or Van-der Waals bonds the origination and growth of cavities and cracks) and the yield processes; 3) the thermal effects neglected in the examinations.

ASSOCIATION: In-t kristallogr. AN SSSR (Institute of Crystallography of AS USSR), Moscow

From author's summary

Translator's remark: Subscripts f (forced), compr (compression), and extens (extension) are translations of the original $_{v}$ (vynuzhdennyy), $_{szhat}$ (szhatiye), and $_{rast}$ (rastyazheniye)

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

S/058/60/000/008/002/009
A005/A001

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 8, p. 170, # 20053

AUTHORS: Regel', V.R., Berezhkova, G.V.

TITLE: The Influence of the Stress State Picture on the Parameters of the Yield Curves of Certain Plastics

PERIODICAL: V sb.: Nekotoryye probl. prochnosti tverdogo tela. Moscow-Leningrad, AN SSSR, 1959, pp. 375-384

TEXT: Polymethylmethacrylate (I) with various plasticizer content was studied. The values of the limits of the forced elasticity $\sigma_{f\ compr}$ obtained by compression tests do not depend on the ratio h/d of the specimen height to its diameter, when h/d $\geq$ 2. Therefore, when determining $\sigma_{f\ compr}$, it is sufficient to examine specimens with h/d = 2. The ratio of the limits of the forced elasticity determined from compression- and extension tests $K = \sigma_{f\ compr}/\sigma_{f\ extens}$ is, as a rule, greater than unity. For I without plasticizer K = 1.65 at 25°C. The increase in plasticizer content leads to increase in K. The difference between $\sigma_{f\ compr}$ and $\sigma_{f\ extens}$ may be explained by the following causes: 1) the variation in the rearrangement conditions of the atoms and molecules in conse-

Card 1/2

BEREZHKOV, Valentin Mikhaylovich; MATEYUNAS, P., red.; TROYANOVSKAYA, N., tekhn. red.

[From the Sungari to the Tropic of Cancer] Ot Sungari do tropika Raka. Moskva, Gos. izd-vo polit. lit-ry, 1958. 149 p. (MIRA 11:9)
(China--Economic conditions)

BEREZHKOV, V.M.

"An Attachment for Dressing Abrasive Wheels"

Stanki i Instrument, 10, no. 2, 1939

Kiev Krasnoznamennyy Plant

1. BEREZHKOV, R. P. Deceased *

2. USSR (600)

4. Locusts

7. Injurious grasshoppers of Western Siberia and their control. Trudy Tonsk. un. 114 1951.

* obituary Rostislav Petrovich Berezhkov 1891-1961
Ent. obozr., 41 no 3, p 699 1962.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

BEREZHKOV, P.I.

Production potentials of small-section and wire mills in plants of the R.S.F.S.R. Biul.tekh.-ekon.inform. no.2:3-5 '62. (MIRA 15:3)

(Rolling mills) (Wire drawing)

BEREZHKOV, P.I.

Operating plate rolling mills. Biul.tekh.-ekon.inform. no.8:3-5 '61. (MIRA 14:8)

(Rolling (Metalwork))

BEREZHKOV, P.I.; ZINOV'YEV, A.F.

Mechanization of the preparation of metals for rolling and of finishing the rolled products. Biul. tekh.-ekon. inform. no. 4:8-11 '61. (MIRA 14:5)
(Rolling (Metalwork)—Technological innovations)

BEREZHKOV, L. F., kand. med. nauk

Effectiveness of reserpine in treating children with rheumatism. Pediatriia 41 no.3:33-39 '62. (MIRA 15:2)

1. Iz kliniki starshego detskogo vozrasta (nauchnyy rukovoditel' - deystvitel'nyy chlen AMN SSSR prof. O. D. Sokolova-Ponomareva) Instituta pediatrii AMN SSSR (dir. M. Ya. Studenikin).

(RESERPINE) (RHEUMATIC FEVER)

BEREZHKOV, L.F.; GAMOVA, I.I.; YELIZAROVA, Z.I.; USMANOVA, A.V.; GORBUNOVA, N.G.; NIKOLAYEVA, N.M.

Characteristics of the course of toxic forms of diphtheria of the pharnyx in children during 1954-1955. Nauch. rab. asp. i klin. ord. no.6:61-67 '60. (MIRA 14:12)

1. Kafedra pediatrii (zav. deystvitel'nyy chlen AMN SSSR prof. G.N. Speranskiy) TSentral'nogo instituta usovershenstvovaniya vrachey.
(DIPHTHERIA) (PHARYNX--DISEASES)

BEREZHKOV, L.F.

Effect of the activeness of the rheumatic process on the function of the thyroid gland in children. Nauch. rab. asp. i klin. ord. no.6: 53-60 '60. (MIRA 14:12)

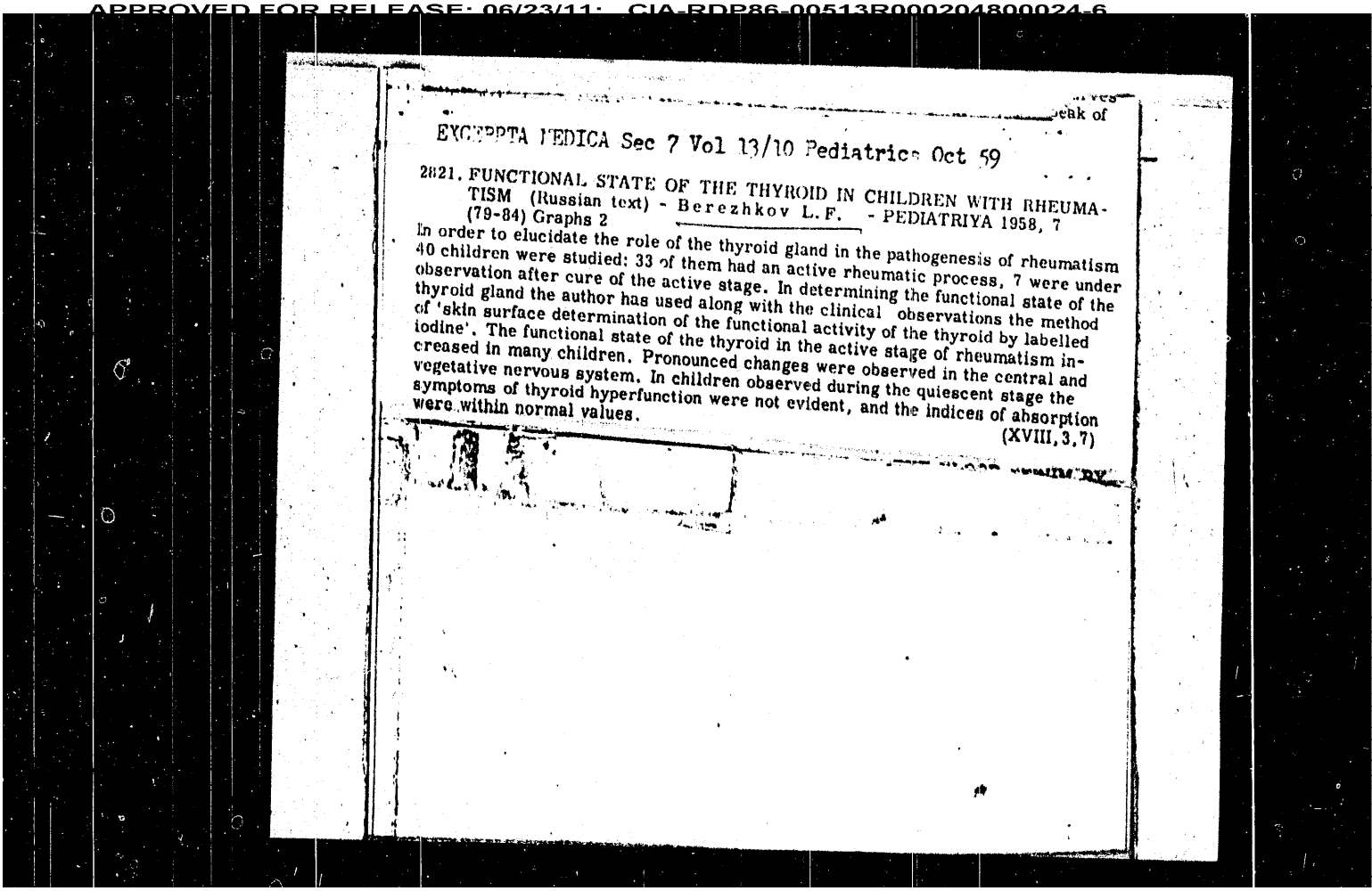
1. Kafedra pediatrii (zav. deystvitel'nyy chlen AMN SSSR professor G.N.Speranskiy) TSentral'nogo instituta usovershenstvovaniya vrachey.
(RHEUMATIC FEVER) (THYROID GLAND)

BEREZHKOV, L.F., Cand Med Sci -- (diss) "Functional state of the thyroid gland in ~~the case of~~ rheumatism in children." Mos, 1959, 15 pp (Acad Med Sci USSR. Order of Labor Red Banner Inst of Pediatrics) 200 copies (KL, 28-59, 130)

BEREZHKOV, L.F.

Study of thyroid gunction in children by the use of iodine isotopes.
Pediatriia 36 no.11:32-36 N '58. (MIRA 12:8)

1. Iz kafedry pediatrii (zav. - deystvitel'nyy chlen AMN SSSR prof. G.N. Speranskiy) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. V.P. Lebedeva).
(THYROID GLAND) (IODINE--ISOTOPES)



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EXCERPTA MEDICA Sec 7 Vol 13/10 Pediatrics Oct 59

2821. FUNCTIONAL STATE OF THE THYROID IN CHILDREN WITH RHEUMATISM (Russian text) - Berezhkov L.F. - PEDIATRIYA 1958, 7 (79-84) Graphs 2

In order to elucidate the role of the thyroid gland in the pathogenesis of rheumatism 40 children were studied: 33 of them had an active rheumatic process, 7 were under observation after cure of the active stage. In determining the functional state of the thyroid gland the author has used along with the clinical observations the method of 'skin surface determination of the functional activity of the thyroid by labelled iodine'. The functional state of the thyroid in the active stage of rheumatism increased in many children. Pronounced changes were observed in the central and vegetative nervous system. In children observed during the quiescent stage the symptoms of thyroid hyperfunction were not evident, and the indices of absorption were within normal values.

(XVIII,3,7)

BEREZHKINA, G.M.

Lithological features of Cenozoic deposits in the middle Ob' Valley. Vest. Mosk. un. Ser. biol., pochv., geol., geog. 13 no.2:163-175 '58. (MIRA 11:9)

1. Moskovskiy gos. universitet, Kafedra gruntovedeniya i inzhenernoy geologii.
(Ob' Valley--Geology, Stratigraphic)

BEREZHNITSKIY, S.N., inzh.; SAGAN', V.Yu., inzh.

From experience of welding joints in copper-nickel pipes with an argon blow. Sudostroenie 30 no.11:60-61 N '64.
(MIRA 18:3)

BEREZHNITSKIY, M.N. (Ivano-Frankovsk)

Oscillographic studies in chronic lung diseases. Klin. med. 41 no.6:120-123 Je '63. (MIRA 17:1)

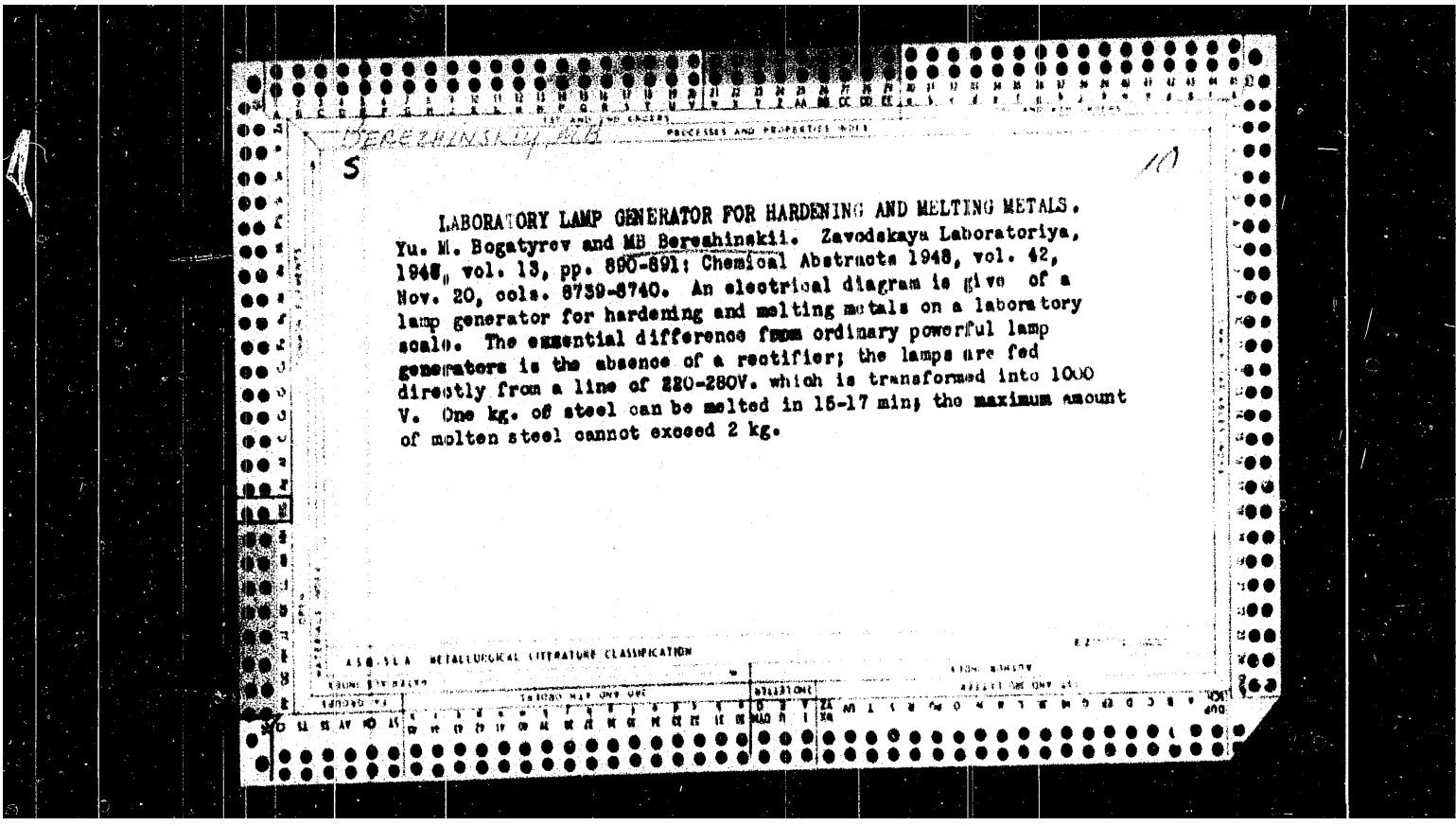
1. Iz 1-y Gorodskoy bol'nitsy, (g. Ivano-Frankovsk; nauchnyye rukovoditeli - prof. M.L. Aviosor i prof. Ye.P. Mel'man.)

BEREZHNINSKIY, V.G.; TOKAREV, A.F.

Automatic unit for the assembly of electrode-plate blocks of alkaline batteries. Biul.tekh.-ekon.inform. Gos.nauch.-issl. inst.nauch. i tekh.inform. 16 no.5:42-43'63. (MIRA 16:7)
(Electric batteries)

BERENZHINSKIY, M.B.

Improved industrial high-frequency apparatus with electron-tube generators. [Izdaniia] LONITOMASH no.30:122-139 '52. (MLRA 8:1)
(Induction heating) (Electron-tube oscillators)

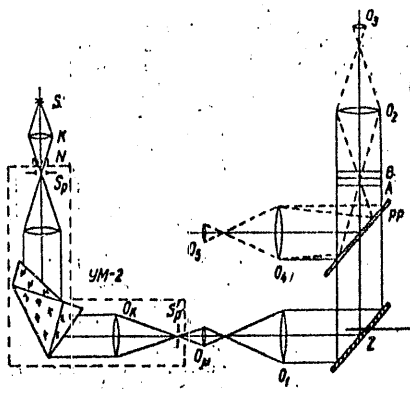


PERCHINSKII, MB

S

10

LABORATORY LAMP GENERATOR FOR HARDENING AND MELTING METALS. Yu. M. Bogatyrev and MB Bereshinskii. Zavodskaya Laboratoriya, 1948, vol. 13, pp. 890-891; Chemical Abstracts 1948, vol. 42, Nov. 20, cols. 8739-8740. An electrical diagram is give of a lamp generator for hardening and melting metals on a laboratory scale. The essential difference from ordinary powerful lamp generators is the absence of a rectifier; the lamps are fed directly from a line of 220-280V. which is transformed into 1000 V. One kg. of steel can be melted in 15-17 min; the maximum amount of molten steel cannot exceed 2 kg.



Optical arrangement for mirror-surface quality control

diaphragm; S_p - monochromator entrance slit; $O_к$ - camera objective; S'_p - exit slit; $O_м$ - micro-objective; O_1 - recollimating objective; Z - slewable mirror; pp - semitransparent plate; A - reference plate; B - test specimen; O_2 O_3 and O_4 O_5 - observation tubes (telescopes). The well-known interference method is employed for studying optical inhomogeneities in laser rods. Soviet-made ITR-2 (Rayleigh type) and IZK-453 (Jamin type) interferometers have been tried for both qualitative and quantitative tests of the inhomogeneities. The ITR-2 instrument is capable of measuring 10–30-mm long 5–10-mm wide plates or 80-mm long 7–12-mm diameter rods with an error of $\lambda/15$ to $\lambda/20$. Orig. art. has: 14 figures and 16 formulas and 1 table.

SUB CODE: 20 / SUBM DATE: 12Feb66 / ORIG REF: 004 / OTH REF: 005

Card 2/2 ULR

L 45858-66 EWT(1)/EEC(k)-2/T/EWP(k) IJP(c) WG/GD

ACC NR: AT6015148 SOURCE CODE: UR/0000/66/000/000/0327/0346

59
56
B+1

AUTHOR: Lisitsa, M. P.; Berezhinskiy, L. I.; Valakh, M. Ya.

ORG: none

TITLE: Determining spatial and surface inhomogeneities in the active substances and interferometer mirrors of lasers

SOURCE: Respublikanskiy seminar po kvantovoy elektronike. Kvantovaya elektronika (Quantum electronics); trudy seminara. Kiev, Naukova dumka, 1966, 327-346

TOPIC TAGS: solid state laser, laser R and D, LASER OPTIC MATERIAL

ABSTRACT: Attempts to develop experimental outfits intended for mirror surface-quality control and for detection of optical inhomogeneities inside laser active rods are described; Soviet-made instruments and materials have been used. D. R. Herriott's method (J. Opt. Soc. Am., 1961, 51, 1142) is used for the mirror-surface testing; the multislit diaphragm is placed in the plane of the entrance slit of a UM-2 monochromator; seven 100-μ wide slits are arranged at 500 μ from each other. The optical arrangement (see figure) includes: S - light source; K - condensor; N - multislit

Card 1/2

L 3154-66

ACCESSION NR: AP5016043

ENCLOSURE: 01

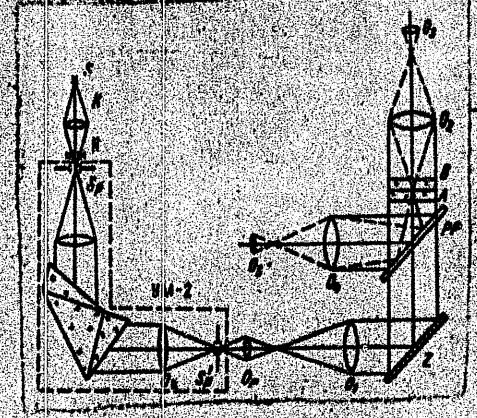


Fig. 1. Optical diagram of setup.

S - Continuous spectrum source, K - condenser, N - diaphragm, S_p - entrance slit of monochromator, O_k - $P_{camera\ lens}$, S' - exist slit, O - microlens, O_1P - recollimating lens, Z - swinging mirror, PP - semitransparent plate, A - standard plate, B - investigated sample, O_2-O_5 - sighting tubes for observation of interference fringes.

Card 3/3

L 3154-66
ACCESSION NR: AP5016043 O

plane of the entrance slit. The interference fringes were measured with the aid of a microscope (MIR-12). The apparatus was thus made up of inexpensive and readily available parts. Surface defects could be readily detected with accuracies 0.005λ if the mid-section of the visible spectrum was used. The apparatus can be used to control surface inhomogeneities not only of transparent but also of opaque objects. Orig. art. has: 4 figures, 7 formulas and 1 table.

ASSOCIATION: None

SUBMITTED: 07Jul64 ENCL: 01 SUB CODE: OP

NR REF SOV: 001 OTHER: 002

Card 2/3

L 3154-66 EWT(d)/EWT(l)/EWP(e)/EWP(v)/T/EWP(k)/EWP(l)/ETC(m) IJP(c) WW

ACCESSION NR: AP5016043 UR/0368/65/002/005/0409/0414
535.89

AUTHORS: Berezhinskiy, L. I.; Lisitsa, M. P. 44,55 44,55 B

TITLE: Control of the quality of plane optical surfaces 21,44,55

SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 5, 1965, 409-414

TOPIC TAGS: quality control, optic research, surface property

ABSTRACT: A procedure and apparatus are described for the control of the quality of the flat optical surfaces with accuracy not lower than 0.01 of the wavelength of visible light. The procedure is based on multi-frequency multipath interference, first used by D. R. Herriott (JOSA v. 51, 1142, 1961). The smoothness and planeness of the entire surface can be checked simultaneously by illuminating the sample with a set of monochromatic light beams of nearly equal frequencies. An optical diagram of the apparatus is shown in Fig. 1 of the Enclosure. The monochromatic set of beams was generated by means of a single monochromator (UM-2), with a set of equidistant slits placed in the

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L 17595-65
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BEREZHINSKIY, A.I.

L 10668-65 EWT(d)/EWT(m)/EWP(c)/EWA(d)/EWP(v)/T-2/EWP(t)/EWP(k)/EWP(b)/EWP(l)
ACCESSION NR AM4046730 BOOK EXPLOITATION Pf-4 MJW/JD/ S/
MLK

Samarin, A. M., ed. (Corresponding member, Academy of Sciences, U.S.S.R.) 81

Steel production; handbook (Staleplavil'noye proizvodstvo; spravochnik), t. 2., Moscow, Izd-vo "Metallurgiya", 1964, 1039 p. illus., biblio., tables. Errata slip inserted. 5,850 copies printed.

TOPIC TAGS: steel, open-hearth furnace, quality control, refractory

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Ch. XVI. Mechanics of furnace gases in open-hearth furnaces (G. M. Glinkov) -- 554
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TRUSHLYAKOV, V.P.; BEREZHINSKIY, A.I.; SPIVAK, M.Ya.; FINOGEYEV, I.A.; LIPETS, A.U.; AYZEN, B.G.; KOSTOVETSKIY, D.L.; BOLDZHI, K.I.; YAMPOL'SKIY, S.L.; FEDOTOV, D.K.; KIRILLOV, I.I.; OSHEROV, S.Ya.; ZYSIN, V.A.; OGLOBLIN, G.A.; KANAYEV, A.A.; BULEGA, S.S.; BORUKHMAN, V.A.; IOEL'SON, V.I.

Inventions. Energ. i elektrotekh. prom. no.3:48-49 Jl-S '64. (MIRA 17:11)

BEREZHINSKIY, A.I., kand.tekhn.nauk; SHKLYAR, V.S., inzh.

Technological utilization of heat in high-speed metal heating.
Prom. energ. 19 no.3:9-11 Mr '64. (MIRA 17:4)

BEREZHINSKIY, A.I., kand. tekhn. nauk

Use of secondary power resources in plants of ferrous metallurgy.
Prom. energ. 18 no.10:8-14 O '63. (MIRA 16:10)

BEREZHINSKIY, A.I., kand.tekhn.nauk

Protection of regenerators using evaporative heating surfaces.
Prom.energ. 17 no.4:16-21 Ap '62. (MIRA 15:4)
(Furnaces) (Heat regenerators)

BERLZHINSKIY, A.I., kand. tekhn.nauk

Utilization of the physical heat of waste gases from metallurgical furnaces. Trudy NTO chern. met. 20:253-268 '60. (MIRA 13:10)

1. Gipromez.
(Metallurgical furnaces) (Waste heat)

Cooling of Converter Gases in Waste Heat Boilers Before Cleaning

gases in a waste-heat boiler which becomes a composite part of the converter installation. A common gas cleaning plant for a number of converters and boilers appears to have distinct advantages. The use of waste-heat boilers with forced circulation is advantageous. In order to increase the economy of the installation the clearance between the converter and the chimney should be reduced to decrease air leakage. There are 9 figures and 2 tables.

ASSOCIATION: Gipromez

SOV/133-59-5-31/31

AUTHORS: Berezhinskiy, A.I., Candidate of Technical Sciences

TITLE: Cooling of Converter Gases in Waste Heat Boilers Before Cleaning (Okhlazhdeniye konverternykh gazov v kotlakh-utilizatorakh pered ochistkoy)

PERIODICAL: Stal', 1959, Nr 5, pp 472 - 479 (USSR)

ABSTRACT: A scheme of cooling gases from oxygen-blown converters in waste-heat boilers before cleaning proposed by Gipromez is discussed. Amounts and composition of gases from 20, 50, 75 and 100 ton converters - Table 1; the dependence of the temperature of combustion of gas from a 50 ton converter on the excess air - Figure 1; data on the economy of cooling converter gas by water injection and in waste-heat boiler - Table 2; scheme for the inclusion of waste-heat boiler into the flow scheme of the waste gas - Figure 2; diagram of the circulation contour of the waste-heat boiler and the gas track - Figures 5, 6, respectively; method of cleaning heating surfaces - Figure 8; a scheme for an automatic control of the parameters of the gas track - Figure 9. It is concluded that it is most economical to cool converter

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Energ. byul., 2, 14-18, F 1955 AID P - 1664

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with mathematical formulae and diagrams.

Institution: None

Submitted : No date

BEREZHINSKIY, A. I.

AID P - 1664

Subject : USSR/Engineering

Card 1/2 Pub. 28 - 4/9

Author : Berezhinskiy, A. I.

Title : Operation of boilers with forced circulation and without cavitation

Periodical : Energ. byul., 2, 14-18, F 1955

Abstract : The author describes the set-up and operation of the waste-heat boilers with forced feed-water circulation, which in recent years have received wide acceptance in industry and now are in serial production. Since the most - sensitive section of these boilers appears to be its intake pump-piping system, the author presents an exhaustive analysis of disturbances which occur here under various circumstances, substantiating his deductions

BEREZHINSKIY, A. I.
B

Steam boilers

Operation of a horizontal boiler with multiple forced circulation. Za ekon. top., no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.